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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,577	07/31/2006	Gerard De Haan	NL 040100	3054

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
LEE, MICHAEL	

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
04/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,577	DE HAAN ET AL.	
	Examiner	Art Unit	
	M. Lee	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not provide support for the invention regarding a method for deinterlacing as recited in claims 1-8, a display device as recited in claim 9, and the computer program as recited in claim 10.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 10 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program as claimed is considered nonstatutory subject matter which is clearly defined in MPEP 2106.1.

5. Claims 1-8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be

performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing ("[t]he Supreme Court has recognized only two instances in which such a method may qualify as a section 101 process: when the process 'either [1] was tied to a particular apparatus or [2] operated to change materials to a 'different state or thing.'" See PTO Supp. Br. 4 (quoting *Flook,* 437 U.S. at 588 n.9). In *Diehr,* the Supreme Court confirmed that a process claim reciting an algorithm could state statutory subject matter if it: (1) is tied to a machine or (2) creates or involves a composition of matter or manufacture. 12 450 U.S. at 184." *In re Comiskey,* 84 USPQ2d 1670 (Fed. Cir. 2007). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. In order for a process to be "tied" to another statutory category, the structure of another statutory category should be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4, 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillard (4,864,394).

Regarding claim 1, Gillard disclose the claimed defining step for defining pre-defined values for a first motion vector and a second motion vector (note vectors A, B, C and D), the claimed step of calculating at least one first pixel (the shifting of the pixels in the first field according to one of the motion vectors as described in col. 17, line 16), the claimed step of calculating a least one second pixel (the shifting of the pixels in the second field according to one of the motion vectors as described in col. 17, line 16), the claimed step of calculating a reliability of the first and second motion vectors comparing the two calculated pixels (the differences in between the motion compensated or shifted pixels by the respective motion vectors A-D are obtained by the PROM as described in col. 17, lines 17-20), and the step of estimating an actual value of the motion vector (the priority selection circuit 103 selects a primary or most reliable vector in accordance with the comparison results as described in col. 17, lines 30-36).

Regarding claim 2, the motion vectors A-D are related to each other.

Regarding claim 4, each of the motion vectors in Gillard is calculated by subtracting the pixel in the first field from a corresponding pixel in the second field. The motion vector value is equal to zero is the two corresponding pixels are the same.

Regarding claim 5, the reliability of the motion vectors is calculated by subtracting two corresponding pixels in between the first and second fields.

Regarding claim 9, see rejection to claim 1.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 3, 6-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillard (4,864,394).

Regarding claim 3, Gillard does not specify that the motion vectors are inverted. Since the motion vectors are in numerical form, they can be represented in many forms, such as in the inverted form as claimed. It is considered a matter of design choice and would have been obvious to one of ordinary skill in the art.

Regarding claim 6, Gillard does not disclose the error criteria is calculated from an absolute sum over a block of pixels. However, Gillard does teach that each of the motion vectors represents a group or blocks of pixels (note col. 15, lines 37-46). In order to calculate the pixel difference for each of the blocks in the PROM 102 or 105 in accordance with their respective motion vector, it would have been obvious to one of ordinary skill in the art to recognize that the absolute sum of the pixels in a block must be calculated. Otherwise, the difference cannot be calculated in any other way.

Regarding claim 7, note col. 18, line 6.

Regarding claim 8, note col. 17, lines 42-45.

Regarding claim 10, in addition of rejection to claim 1, Gillard does not disclose the computer program as claimed. The examiner takes Official Notice that using computer program to implement an invention is well known in the art because it is cost effective and efficient as compare to its hardware counterpart. Hence, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to implement the television standard converter of Gillard by a computer program so that the cost of product could be reduced.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sohn (7,006,157) shows a motion vector selector (Figure 4).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran, can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/M. Lee/
Primary Examiner
Art Unit 2622